REMARKS

Reconsideration of the rejection of Claims 1-3, 5-7, 9, 10 and 15-19 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,786,998 to Neeson, et al. is hereby requested.

Claim 1 has been amended. Amended Claim 1 recites:

> "A method of transferring files between a computer onboard a train and remote stations comprising:
>
> collecting one or more of event recorder data, train performance data and track data from onboard in files on the on-board computer;
>
> **determining onboard if a remote station is within communication range;**
>
> **initiating from onboard wireless communication between the on-board computer and the remote station determined to be within communication range**; and
>
> determining onboard which of the files are new since last transmission, and transferring the new files to the remote station." (Underlining reflects the Amendment; the bold emphasis has been added).

In other words, *inter alia*, the present disclosure relates to a method involving **the collection of operational data** on a locomotive. After that, **on-board the locomotive**, it is determined whether a remote station is within communication range, and if it is, then **on-board** the **locomotive initiates** a wireless communication between its on-board computer and the remote station determined to be within range.

On the other hand, Neeson, et al., as indicated by its title, is an Apparatus and Method For Tracking, Reporting and Recording **Equipment Inventory** on a Locomotive (emphasis added). An on-board computer communicates with "intelligent devices" on-board the locomotive and builds a "Health Report" indicating the presence or absence of those "intelligent devices" and their status. This "Health Report" is transmitted to a wayside or base station 52, 54 along the edge of the track, and the "Health Report" subsequently is transmitted to a front end processor 46. As specifically indicated at col. 8, lines 41-43 of Neeson, et al., "the mobile communications package 12 monitors the on-board 'intelligent devices' and reports initial configuration and configuration changes to the front end processor 46...".

Applicants acknowledge that, regarding the method steps of Applicants' Claim 1 dealing with the collection of data, the determination of which computer files are new since last transmission and the transferring of the new files to the remote station, there is no dispute in that both Neeson, et al. and Applicants' present disclosure teach those steps.

However, Applicants strongly assert that Neeson, et al. does not disclose two of the **steps of Applicants' Claim 1,** that is: "determining onboard if a remote station is within communication range..." and "initiating from onboard wireless communication between the on-board computer and the remote station determined to be within communication range."

In Neeson, et al., there is no explicit disclosure that a determination is made on-board of whether a remote station is within range. Likewise, in Neeson, et al. there is no explicit disclosure that the wireless communication between the on-board computer and the remote station determined to be within range is initiated from on-board the locomotive. In direct contrast, the disclosure and description in Neeson, et al. is that the ground network or remote stations are in control of communications with the locomotive. As the Examiner noted in the Office Action dated May 6, 2003, "...the method of Neeson, et al. builds on and incorporates the elements of the AMCI Base Network System (ABNS)...". As stated in Neeson, et al. at col. 2, lines 5-7, "...in ABNS, communications with locomotives is **initiated** through the base stations which are in contact with mobile communication packages (MCP) on-board the locomotives." As further stated in Neeson, et al. at col. 7, lines 29-47 and col. 8, lines 1-4:

> "each base station 52 and 54 is preferably located along side a railroad track, with the base stations being spaced apart along the length of the track such that as a field unit [i.e., a locomotive] 36 moves along the track, it remains in radio contact range of the nearest base station and is 'passed off' to the next base station along the track. Hundreds of base stations are situated along railroad tracks throughout the railroad system, thus enabling field units 36 to remain in contact with the dispatcher 32 or customer service representative 35. In other words, the base stations 52 and 54 provide the interface from the ground network which connects the base stations 52 and 54 with the front end processor 46 and the radio frequency network which connects the base stations 52 and 54 and field units 36." (Emphasis added). "The front end processor 46 may accurately track the location of any field unit 36 based on which base station 52 and 54 is being used to maintain radio contact with the field unit 36 via SSI (the signal strength indicator in ABNS) which compares the signal strength of the incoming signal to a full strength signal to determine the distance between the field unit 36 and the receiving base station 52 and 54." (Emphasis added).

As further noted by the Examiner on page 4 of the Office Action dated May 6, 2003, "'[P]assing off" communication to the next station along the path (as disclosed by Neeson, et al.) is a function of determining if a remote station is in range. Neeson, et al. discloses the field unit (locomotive) remaining in radio contact range of the nearest base station as it

moves along the track." The Examiner goes on to say that "...[P]assing off **infers** that as a new base station comes within range, radio communication is handled by the new base station that is determined to be within range. Further, Neeson, et al. discloses an on-board determination of whether any remote station is within range (see col. 5, lines 16-32, where it is described how the locomotive does not attempt to send data when it is determined to be out of communication with the ground network)". Thus, it appears that the Examiner is inferring or attributing a feature or features (an on-board determination and initiation) to the on-board computer that runs directly contrary to all the expressed disclosures of Neeson, et al. Those disclosures indicate that the base stations 52, 54, or more generally, the "ground network", controls the communication between and among the locomotive, the base stations 52, 54 and the front end processor 46. As further evidence that neither a determination nor an initiation is made on board, col. 5, lines 16-32 of Neeson, et al. states:

> "An important element of the apparatus and method of the present invention is that the processing device [on board] will not attempt to send equipment inventory information to a remote location if the locomotive is not in contact with the ground network of the stations. This feature prevents the "tying up" of the radio transmitter in the mobile communications package with repeated attempts to transmit the equipment identification information. This is important because the MCP is commonly a half-duplex device, which means that although one radio frequency is used for incoming messages and another is used for outgoing messages, the MCP cannot receive and transmit messages simultaneously. If the MCP is constantly attempting to transmit equipment identification information while the locomotive is out-of-range, the MCP may not be able to receive important emergency information from the dispatcher upon returning to contact with the ground network."

This disclosure does not state, as the Examiner has asserted, that the locomotive determined whether a remote station was within range. Nor does it state that the locomotive then initiated a wireless communication. The heart of the Neeson, et al. disclosure runs contrary to the Examiner's assertions. Since the communication system is a half-duplex system, an attempt by the locomotive at continuous transmissions would prevent the locomotive from receiving a signal from the ground network. That is why a transmission from the locomotive does not take place until the ground network has initiated and established communication with the locomotive. It is clear that the disclosure of Neeson, et al. indicates that communication is initiated from the ground network. The locomotive, once communication has been established from the ground network, then transmits its information. Thus, Neeson, et al. only teaches the transmission of information once communication has been initiated and established from the ground network. This is totally different from the Applicants' claimed

invention which includes the method steps of: "determining on-board if a remote station is within communication range"; and, "initiating from on-board wireless communication between the on-board computer and the remote station determined to be within communication range."

Finally, Examiner states on page 4 of the current Office Action that "'passing off' **inherently** requires the locomotive computer to change communication parameters such as channel frequencies and establish a new communications link with a new base station. The locomotive computer **must** initiate the change in communication channel in response to the hand-off request from the old (pre-handoff) station. 'Passing off' is done to ensure that the locomotive maintains a sufficient signal quality as it moves along the tracks. Receiving and processing a hand-off request **implies** that the locomotive computer determines, based on the hand-off data, that a new base station is within communication range. Executing the hand-off **requires** that the locomotive computer establish on-board wireless communication with the new base station."

Applicants strongly assert that Neeson, et al. does not disclose that the locomotive computer necessarily can or will **change any** "communication parameters such as channel frequencies." As far as Applicants know, changing communication parameter is not inherent in every locomotive computer. Nor is there any disclosure in Neeson, et al. that "the locomotive computer **must initiate** the change in communication channel in response to the hand-off request from the old (pre-handoff) base station." There appears to be no disclosure of any "hand-off request" in Neeson, et al. that relates to the locomotive. Nor is there a basis for **any implication** that the locomotive computer determines anything related to hand-off data. Nor is there any disclosure that "executing the hand-off **requires** that the locomotive establish on-board wireless communication with the new base station.".

Applicants assert that the Examiner's use of "inherency" and "implication" cannot substitute for an actual disclosure in Neeson, et al. unless what is considered to be inherent or implied is necessarily present. Possibilities and probabilities are not sufficient. Neeson, et al. does not expressly disclose that its on-board computer determines on-board if a remote station is within communication range and that the on-board computer initiates an on-board wireless communication between the on-board computer and the remote station determined to be within the communication range. In fact, Neeson, et al. teaches just the opposite, that the wayside stations or ground network initiates and controls the communication network between the wayside stations, the front end processor, the dispatcher or customer service representative and the field units.

In support of Applicants' assertions, Applicants cite the following: from the MPEP §2112, "*Requirements of Rejection Based on Inherency; Burden of Proof.*"

> ***EXAMINER MUST PROVIDE RATIONALE OR EVIDENCE TENDING TO SHOW INHERENCY***
>
> The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.
>
> In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); In re Oelrich, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted) (The claims were drawn to a disposable diaper having three fastening elements. The reference disclosed two fastening elements that could perform the same function as the three fastening elements in the claims. The court construed the claims to require three separate elements and held that the reference did not disclose a separate third fastening element, either expressly or inherently.).
>
> "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original) (Applicants' invention was directed to a biaxially oriented, flexible dilation catheter balloon (a tube which expands upon inflation) used, for example, in clearing the blood vessels of heart patients). The examiner applied a U.S. patent to Schjeldahl which disclosed injection molding a tubular preform and then injecting air into the preform to expand it against a mold (blow molding). The reference did not directly state that the end product balloon was biaxially oriented. It did disclose that the balloon was "formed from a thin flexible inelastic, high tensile strength, biaxially oriented synthetic plastic mate-rial." Id. at 1462 (emphasis in original). The examiner argued that Schjeldahl's balloon was inherently biaxially oriented. The Board reversed on the basis that the examiner did not provide objective evidence or cogent technical reasoning to support the conclusion of inherency.).

Therefore, based upon all of the above, it is clear that Neeson, et al. does not disclose the method steps of Applicants' Claim 1, that is: "determining on-board if a remote station is within communication range" and "initiating from on-board wireless communication between the on-board computer and the remote station determined to be within communication range." Thus, Claim 1, as amended, is considered allowable over Neeson, et al., and such is respectfully requested.

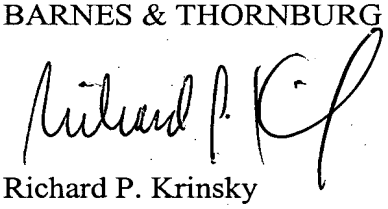
Claim 22 and its dependent claims have been previously cancelled and will be the subject of a continuation application.

Claims 2-7, 9, 10, 12-21 and 46-49 depend from amended Claim 1 and are allowable for at least the same reasons as amended Claim 1, and such is hereby requested. Since Claim 1 is considered generic, Claims 12-14, as included above, should also be considered and be allowable, and such is hereby requested.

In view of all of the above, the Application is now deemed to be in condition for allowance and such is respectfully requested.

It is respectfully requested that, if necessary to effect a timely response, this paper be considered as a Petition for an Extension of Time sufficient to effect a timely response and that shortages in fees, if any, be charged, or any overpayment in fees credited, to the Account of Barnes & Thornburg, Deposit Account No. 02-1010 (509/35644).

Respectfully submitted,
BARNES & THORNBURG



Richard P. Krinsky
Registration No. 47,720
(202) 289-1313

RPK/sld

Enclosure:
Listing of Claims

76400v1

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of transferring files between a computer onboard a train and remote stations comprising:

collecting one or more of event recorder data, train performance data and track data from onboard in files on the on-board computer;

determining onboard if a remote station is within communication range;

~~establishing~~ initiating from onboard wireless communication between the on-board computer and the remote station determined to be within communication range; and

determining onboard which of the files are new since last transmission, and transferring the new files to the remote station.

2. (Original) A method according to claim 1, including determining whether the remote station has updates to be transferred and transferring the updates to the on-board computer.

3. (Original) A method according to claim 2, wherein the updates include one or more of software updates for the on-board computer, operational data and callbook that defines with which remote stations the onboard computer will initiate communication.

4. (Original) A method according to claim 2, wherein determining whether the remote station has updates to be transferred includes comparing the version in the on-board computer to the version in the remote station and transferring only the additions, changes, and deletions resulting between the comparison.

5. (Original) A method according to claim 1, wherein determining if a remote station is within range includes determining location of train and location of next remote station.

6. (Original) A method according to claim 1, wherein determining if a remote station is within range includes transmitting a wireless query and monitoring for a response.

7. (Original) A method according to claim 1, wherein, after an interruption of wireless communication, file transfers may be resumed during one or more subsequent communication sessions until all files have been received successfully.

8. (Canceled)

9. (Previously Amended) A method according to claim 1, wherein the train includes plural event recorders and including transferring data from each of the event recorders to the on-board computer.

10. (Currently Amended) A method according to claim 1, wherein

the train includes plural event recorders each being connected to a respective on-board computer; and

the method includes ~~establishing~~ initiating wireless communication between the on-board computers and the remote station, and transferring event recorder data from each of the on-board computers to the remote station.

11. (Canceled)

12. (Original) A method according to claim 1, including

transferring the files from the remote station to a simulator;

operating the simulator with the transferred files; and

adjusting parameters of the simulator until data of the simulator matches data from the file.

13. (Previously Amended) A method according to claim 12, wherein the parameters include one or more of grade resistance, curve resistance, rolling resistance, tractive effort of the train's locomotives, dynamic brake effort of the locomotives, pneumatic brake system parameters, and train weight.

14. (Original) A method according to claim 12, analyzing the data from the files on the simulator after adjusting of the parameters.

15. (Original) A method according to claim 1, including establishing communication between the remote station and a home base station; and determining what files have to be transferred and transferring the files.

16. (Original) A method according to claim 15, wherein the files to be transferred from the home base station to the remote station includes one or more of software updates for the remote station, software updates for the onboard computer, operational data for the onboard computer, and a callbook that defines with which remote stations the onboard computer will initiate communication.

17. (Original) A method according to claim 15, wherein the files to be transferred from the remote station to the home base include one or more of files received from the on-board computer and files including operation information of the remote station.

18. (Original) A method according to claim 17, wherein operational information includes one or more of: locomotives contacted, which software updates were transferred, which onboard computer files were received, and communication statistics.

19. (Original) A method according to claim 15 wherein communication is established between the remote station and the home base when one or more of remote station has new files from the on-board computer, home base has new software for the remote station or on-board computer, requested by user and according to a schedule.

20. (Original) A method according to claim 1, including establishing communication between two remote stations; and determining what files have to be transferred and transferring the files.

21. (Original) A method according to claim 20, establishing communication and transferring files between remote stations for all the remote stations in a subnet.

22-45. (Canceled)

46. (Original) A method according to claim 1, wherein one of the remote stations includes track data; and including transferring the track data to the on-board computer and subsequently transferring the track data from the on-board computer to another remote station.

47. (Original) A method according to claim 46, including displaying the track data on the train.

48. (Original) A method according to claim 46 wherein the track data includes one or more of signal aspect, crossing gate position, crossing occupancy status, and other trains in the vicinity.

49. (Original) A method according to claim 46 including correlating train performance data with track data.

50. (Canceled)